

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

Claims 1-9 (Canceled).

Claim 10 (Currently Amended): A method to silence a gene of a plant sap-sucking insect, comprising applying to the feed of said plant sap-sucking insect unpackaged, naked dsRNA or siRNA without a transfection promoting agent, which wherein said dsRNA or siRNA is targeted to an essential gene of a plant sap-sucking gene insect.

Claim 11 (Currently Amended): The method of claim 10, wherein said essential gene is any of the genes listed in claim 2 above wherein said essential of said plant sap-sucking insect is selected from the group consisting of genes encoding the following: a gut cell protein, a membrane protein, an ecdyson receptor, a  $\gamma$ ATPase, an amino acid transporter, a transcription factor, a peptidylglycine alpha-amidating monooxygenase; a cystein protease, an aminopeptidase, a dipeptidase, a sucrase/ transglucosidase, a translation elongation factor, an eucaryotic translation initiation factor 1A, a splicing factor, an apoptosis inhibitor; a tubulin protein, an actin protein, an alpha-actinin protein, a histone, a histone deacetylase, a cell cycle regulatory protein, a cellular respiratory protein; a receptor for an insect-specific hormonal signal, a juvenile hormone receptor, an insect peptidic hormone receptor; a protein regulating ion balance in a cell, a proton-pump, a Na/K pump, an intestinal protease; an

enzyme involved in sucrose metabolism, a digestive enzyme, a trypsin-like protease and a cathepsin B-like protease.

Claim 12 (Canceled).

Claim 13 (Currently Amended): A method to silence a gene in an plant sap-sucking insect, comprising: adding naked, unpackaged dsRNA or siRNA without a transfection-promoting agent to the diet or feed of said plant sap-sucking insect, wherein said dsRNA or siRNA targets said gene.

Claims 14-28 (Canceled).

29. (New) The method of claim 10, wherein said essential plant sap-sucking gene is a gene encoding a translation initiation factor with a DNA sequence having higher than 70 % sequence identity to the DNA of SEQ ID NO: 5.

30. (New) The method of claim 10, wherein said essential plant sap-sucking gene is a gene encoding a translation initiation factor with a DNA sequence having higher than 85 % sequence identity to the DNA of SEQ ID NO: 5.

31. (New) The method of claim 10, wherein said essential plant sap-sucking gene is a gene encoding a translation initiation factor with a DNA sequence having higher than 90 % sequence identity to the DNA of SEQ ID NO: 5.

32. (New) The method of claim 10, wherein said essential plant sap-sucking gene is a gene encoding a translation initiation factor with a DNA sequence having higher than 95 % sequence identity to the DNA of SEQ ID NO: 5.

33. (New) The method of claim 13, wherein said essential plant sap-sucking gene is the gene corresponding to the DNA of SEQ ID NO: 5.

34. (New) The method of claim 33, wherein only that portion from nucleotide position 72 to the end in SEQ ID NO:5 is used as gene target in designing the dsRNA molecule.

35. (New) A method of controlling sap-sucking insects, comprising feeding said insects dsRNA or siRNA without a transfection promoting agent, wherein said dsRNA or siRNA is targeted to an essential gene of said plant sap-sucking insects.

36. (New) The method of any one of claims 10, 13 or 35, wherein the sequence of said dsRNA or siRNA is a sequence that targets essential gene sequences present in a plurality of plant sap-sucking insects of a plant host, and wherein said essential gene sequences have a sequence identity of higher than 95 %.